12   DNA DATA BANK ANALYST QUALIFICATION

12.1   GOALS:

12.1.1   To demonstrate technical knowledge by successfully completing an oral examination.

12.1.2   To demonstrate skills and abilities by successfully completing all practical exercises, including a final competency examination.

12.2   TASKS:

12.2.1   Undergo final oral and competency examinations.

12.2.2   Conduct analysis on blood and/or buccal samples as set forth in this training document.

12.2.3   Become familiar with DNA testing guidelines/standards set forth by the following groups:

- Scientific Working Group on DNA Analysis Methods (SWGDAM)
- American Society of Crime Laboratory Directors/ Laboratory Accreditation Board (ASCLD/LAB®)
- FBI Quality Assurance Standards

12.3   TRAINING EVALUATION:

12.3.1   Knowledge

12.3.1.1   Question and answer sessions.

12.3.2   Skills

12.3.2.1   The trainee should demonstrate the ability to accurately complete the analysis on DNA Data Bank samples and document results in accordance with Division and section policies and procedures.

12.3.3   Completion of the trainee checklist by the training coordinator.

STUDY QUESTIONS:

1.   What is a proficiency test? Do you participate in proficiency testing? What is your error rate? Do you participate in blind proficiency testing?

2.   What does SWGDAM stand for and what is this organization's function?

3.   What is a DNA audit? How often is your laboratory audited? Who performs the audit?

4.   What is the rationale for having different laboratory areas for isolation, PCR set up, amplification and typing?

5.   What controls do you run during your PCR analyses?

6.   What is a null allele?

7.   What is the difference between a genotype and a phenotype?

8.   What is the misincorporation rate of the AmpliTaq Gold enzyme?

9.   When was the first time PCR was used in this country? in Virginia?

10.   What does DAB stand for and what is its function? How was it created and why? Is it still in existence?

11.   Explain the purpose of the FBI Quality Assurance Standards.

12.   What does ASCLD/LAB® stand for and what is its function?

13.   Who serves as the Division's Quality Assurance Officer?

14.   Who serves as the Division's Safety Officer?

CHECKLIST FOR DNA DATA BANK ANALYST QUALIFICATION

1.   Trainee is skilled in expressing results and conclusions orally in a simple, clear, concise and technically correct manner.

   Date:_____   Training Coordinator:_____

   Comments:_____

2.   Trainee is adept at answering questions on all aspects of forensic DNA analysis based on education, training, knowledge, experience and skills.

   Date:_____   Training Coordinator:_____

   Comments:_____

3.   Trainee has read and understands all applicable literature.

   Date:_____   Training Coordinator:_____

   Comments:_____

4.   Trainee has participated in final practical and oral examinations. Performance was satisfactory.

   Date:_____   Training Coordinator:_____

   Comments:_____

◆END